

What is claimed is:

1. An electrical header connector comprising:
a header body having an internal surface and an external surface, the header body including a plurality of first openings and a plurality of second openings extending from the internal surface to the external surface; and
a plurality of shield blades configured for insertion into the plurality of second openings, each of the plurality of shield blades having at a first end thereof a generally right angle shielding portion configured to be disposed adjacent to a corresponding one of the plurality of signal pins, wherein the first ends of the plurality of shield blades are substantially coplanar with the internal surface of the header body.
2. The header connector of claim 1, further comprising:
a plurality of signal pins configured for insertion into the plurality of first openings to form an array of pin contacts extending from the internal surface of the header body;
3. The header connector of claim 2, wherein the first and second openings are arranged in the header body such that the generally right angle shielding portions of the plurality of shield blades substantially surround the plurality of signal pins to form a coaxial shield around each of the plurality of signal pins.
4. The header connector of claim 2, wherein the plurality of signal pins and the plurality of shield blades are retained in the header body by press-fit.
5. The header connector of claim 1, wherein the first and second openings are arranged in the header body such that the generally right angle shielding portions of the plurality of shield blades substantially surround the plurality of first openings to form a coaxial shield around each of the plurality of signal pins.

6. The header connector of claim 1, wherein the generally right angle shielding portion of each of the plurality of shield blades includes first and second leg portions, and wherein each of the plurality of second openings in the header body has a generally right angle shape for receiving the generally right angle shielding portion of a shield blade.
7. The header connector of claim 6, wherein each of the plurality of generally right angle second openings includes first and second narrowed throat portions dimensioned to engage the first and second leg portions of the generally right angle shielding portion of a shield blade to hold the shield blade in place.
8. The header connector of claim 7, wherein each of the plurality of generally right angle second openings in the header body includes a central portion coupled to the first and second end portions by the first and second narrowed throat portions.
9. The header connector of claim 8, wherein the central portion and the first and second end portions of each of the plurality of generally right angle second openings are shaped to provide an air gap surrounding the generally right angle shielding portion of a shield blade.
10. The header connector of claim 1, wherein each of the plurality of shield blades has a second end thereof extending beyond the external surface of the header body, the second end configured for engagement with a printed circuit board.
11. The header connector of claim 1, wherein the plurality of shield blades are formed in a continuous strip of material.

12. The header connector of claim 11, wherein the continuous strip of material forming the plurality of shield blades further comprises at least one tail configured for engagement with a printed circuit board.
13. The header connector of claim 12, wherein the at least one tail comprises one tail for every two shield blades.
14. The header connector of claim 12, wherein the at least one tail comprises a plurality of tails spaced along the continuous strip of material forming the plurality of shield blades.
15. The header connector of claim 14, wherein the plurality of tails are electrically connected to a common ground.
16. The header connector of claim 1, wherein at least a portion of the plurality of shield blades are formed in a continuous strip of material.
17. A connector system for connection to a printed circuit board, the connector system comprising:
 - a first header body having a front wall formed to include a plurality of first openings and a plurality of second openings therethrough;
 - a second header body having a front wall formed to include a plurality of first openings and a plurality of second openings therethrough, wherein the first and second header bodies are positioned on opposite sides of a printed circuit board;
 - a first plurality of shield blades configured for insertion in the plurality of second openings in the first header body; and
 - a second plurality of shield blades configured for insertion in the plurality of second openings in the second header body;

wherein each shield blade of the first plurality of shield blades has a first end that is substantially coplanar with an internal surface of the first front wall.

18. The connector system of claim 17, further comprising:
a plurality of signal pins configured for insertion in the plurality of first openings in the first and second header bodies, each of the plurality of signal pins extending continuously through the first openings of the first and second header bodies and the printed circuit board;
19. The connector system of claim 17, wherein each shield blade of the second plurality of shield blades has a first end that is substantially coplanar with an internal surface of the second front wall.
20. The connector system of claim 18, wherein each shield blade of the first plurality of shield blades has at the first end thereof a generally right angle shielding portion configured to be disposed adjacent to a corresponding one of the plurality of signal pins.
21. The connector of system claim 17, wherein each shield blade of the first and second pluralities of shield blades has at the first end thereof a generally right angle shielding portion configured to be disposed adjacent to a corresponding one of the plurality of first openings.
22. The connector system of claim 17, wherein at least one of the first and second pluralities of shield blades is formed in a continuous strip of material.
23. The connector system of claim 22, wherein the continuous strip of material forming the plurality of shield blades further comprises a plurality of tails configured for engagement with a printed circuit board.

24. The connector system of claim 23, wherein the plurality of tails comprises one tail for every two shield blades.
25. The connector system of claim 23, wherein the plurality of tails are spaced along the continuous strip of material forming the plurality of shield blades.
26. The connector system of claim 23, wherein the plurality of tails are electrically connected to a common ground within the printed circuit board.
27. The connector system of claim 26, wherein at least one of the plurality of signal pins is connected to the common ground within the printed circuit board.
28. The connector system of claim 25, wherein the plurality of tails are spaced at regular intervals along the length of the continuous strip.
29. The connector system of claim 17, further comprising:
 - a third header body having a front wall formed to include a plurality of first openings and a plurality of second openings therethrough;
 - a fourth header body having a front wall formed to include a plurality of first openings and a plurality of second openings therethrough, wherein the third and fourth header bodies are positioned adjacent the first and second header bodies, respectively, on opposite sides of a printed circuit board; and
 - a plurality of signal pins configured for insertion in the plurality of first openings in the third and fourth header bodies, each of the plurality of signal pins extending continuously through the first openings of the third and fourth header bodies and the printed circuit board ;wherein the first plurality of shield blades is configured for insertion in the plurality of second openings in the first and third header bodies, the first plurality of shield

blades being formed in a continuous strip of material extending between the first and third header bodies to couple the first and third header bodies together; and

wherein the second plurality of shield blades is configured for insertion in the plurality of second openings in the second and fourth header bodies, the second plurality of shield blades being formed in a continuous strip of material extending between the second and fourth header bodies to couple the second and fourth header bodies together.

30. The connector system of claim 17, further comprising:
a socket connector configured to mate with at least one of the first and second header bodies.
31. The connector system of claim 30, wherein the socket connector is configured for connection with a printed circuit board.
32. The connector system of claim 30, wherein the socket connector is a cable connector.
33. The connector system of claim 17, further comprising:
a first socket connector configured to mate with the first header body; and
a second socket connector configured to mate with the second header body.
34. The connector system of claim 33, wherein each of the first and second socket connectors are configured for connection with a printed circuit board.
35. The connector system of claim 33, wherein each of the first and second socket connectors are cable connectors.

36. The connector system of claim 33, wherein the first socket connector is configured for connection with a printed circuit board, and the second socket connector is a cable connector.
37. The connector system of claim 17, wherein at least one of the plurality of signal pins extends through the printed circuit board without making contact with the printed circuit board.
38. The connector system of claim 17, wherein the first and second header bodies each have a longitudinal orientation, and wherein the longitudinal orientation of the first header body is orthogonal to the longitudinal orientation of the second header body.
39. The connector system of claim 18, wherein the plurality of first openings in the first and second header bodies include chamfered entrances.
40. A connector system comprising:
a header connector comprising a front wall having an internal surface, the front wall including a plurality of first openings and a plurality of second openings extending therethrough, a plurality of signal pins inserted in the plurality of first openings to form an array of pin contacts extending above the internal surface of the header body, and a plurality of shield blades inserted in the plurality of second openings, each of the plurality of shield blades having a first end , wherein the first ends of the plurality of shield blades are substantially coplanar with the internal surface of the header body; and
a socket connector configured to mate with the header connector.
41. The connector system of claim 40, wherein the socket connector comprises:
a plurality of signal contacts for making electrical contact with the plurality of signal pins of the header connector; and

at least one shielding element associated with the plurality of signal contacts.

42. The connector system of claim 41, wherein the plurality of shield blades of the header connector and the at least one shielding element of the socket connector are prevented from making electrical contact when the header connector and the socket connector are in a mated condition.
43. The connector system of claim 41, wherein the at least one shielding element of the socket connector comprises a plurality of strip line shielding elements.
44. The connector system of claim 40, wherein the header connector is configured for mounting to a printed circuit board.
45. The connector system of claim 44, wherein the socket connector is configured for connection to a cable.
46. The connector system of claim 44, the socket connector is configured for mounting to a printed circuit board.
47. The connector system of claim 40, wherein the socket connector is a hard metric connector according to industry standard IEC 61076-4-101.
48. The connector system of claim 47, wherein the socket connector is a CompactPCI® connector.
49. The connector system of claim 40, wherein the first end of each of the plurality of shield blades comprise a generally right angle shielding portion configured to be disposed adjacent to a corresponding one of the plurality of signal pins.

50. The connector system of claim 49, wherein the first and second openings are arranged in the front wall of the header connector such that the generally right angle shielding portions of the plurality of shield blades substantially surround the plurality of signal pins to form a coaxial shield around each of the plurality of signal pins.
51. A method of mounting a connector system to a printed circuit board comprising:
attaching a first header connector to a first side of a printed circuit board, the first header connector having a plurality of first openings and a plurality of second openings therethrough, wherein a first plurality of shield blades are inserted in the plurality of second openings in the first header connector; and
attaching a second header connector to a second side of the printed circuit board opposite the first header connector, the second header connector having a plurality of first openings and a plurality of second openings therethrough, wherein a second plurality of shield blades are inserted in the plurality of second openings in the second header connector, and wherein a plurality of signal pins are inserted in the plurality of first openings in the second header connector;
wherein each of the plurality of first openings in the first header connector receive a corresponding one of the plurality of signal pins of the second header connector as the second header connector is attached to the printed circuit board, and wherein each shield blade of at least one of the first and second pluralities of shield blades has a first end that is substantially coplanar with an internal surface of the header connector.